

### *Article 3. Landscaping, Buffers, and Urban Forestry*

#### **6.300 Bufferyard and Supplemental Building Setback**

##### **A. When Required**

A bufferyard consisting of an open space of grass and other landscaping and a masonry wall or wood fence in combination with design features that screen or block vision, noise pollutants, and other negative by-products shall be provided and maintained along the entire length of the boundary line between any one- or two-family district, and adjacent nonresidential districts. A bufferyard shall be required even when an alley is located between a nonresidential district and an adjacent one- or two-family district. Temporary buildings, utility facilities, and additions to primary structures placed on the sites that are less than 30% and under 3,000 square feet are excepted from the bufferyard requirements of this subsection. References in this section adjacent to One or two-Family Districts shall not include uses described in 6.300.K.4. (Ord. No. 20453, Eff. 10/27/12)

##### **B. Restrictions of the Use of Bufferyard and Building Setback Areas**

These areas are intended to serve as a buffer between potentially incompatible uses. Structures are not permitted to be located in these areas, nor can such areas be used for signs, dumpsters or other garbage containers, any type of storage, or any nonresidential activity. Passenger car parking, automobile and truck access and loading or unloading of goods during the daylight hours shall be permitted within the building setback areas exclusive of the landscaped areas.

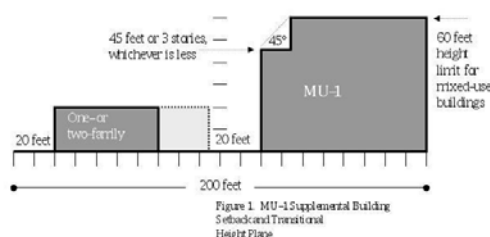
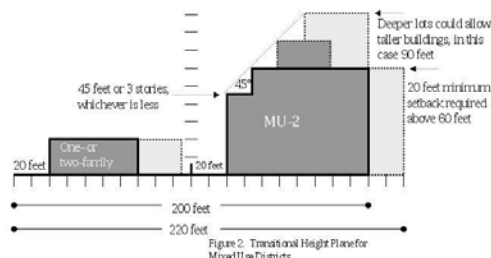
##### **C. Area Requirements**

1. Except as noted in Paragraph 3 below, when a nonresidential use is initially established, a residential use is converted to a nonresidential use, or when the zoning district classification of property is changed to a less restrictive nonresidential district after April 12, 1988, then in each instance where the nonresidential use is located on a lot or premises adjacent to a one- or two-family district, a bufferyard and supplemental building setback shall be provided and maintained by the owner and/or occupant of the nonresidential use in accordance with the following standards.

District	Building Setback	Bufferyard Width
"ER"	20 feet	5 feet
"E"	20 feet	5 feet
"MU-1" **	20 feet	5 feet
"FR"	25 feet	5 feet
"F"	35 feet	5 feet
"G"	40 feet	5 feet
"MU-2" **	20 feet	5 feet
"I"	50 feet*	5 feet
"J"	50 feet*	5 feet
"K"	50 feet*	5 feet
<b>Inactive Districts</b>		
"O-M"	20 feet*	5 feet
"E-P"	20 feet	5 feet
"IP"	50 feet*	5 feet

\* Plus 5 feet for each additional story above 3 stories in height

\*\* 45 degree transitional height plane applies above 45 feet or 3 stories, whichever is less. See Figure 6.1 and Figure 6.2, and explanatory language below.

Figure 6.1 . [\(Popup full image\)](#)Figure 6.2 . [\(Popup full image\)](#)

2. When there is an expansion of any parking area or the square footage of a nonresidential use that is located on a lot or a premises that is adjacent to a one- or two-family district, then the development shall be subject to the supplemental bufferyard and building setback requirements, as set forth in this Section.
3. When the zoning district classification of vacant property is initially established as a nonresidential use or changed to a less restrictive nonresidential district, the required screen fence and bufferyard shall not be required until such time as the property is actually used as a nonresidential use.

#### D. Screening Requirements

The owner and/or occupant of the use shall also erect and maintain a solid masonry wall, wood fence, or combination thereof, to a height that is a minimum of six feet above the grade of adjacent property along the entire adjacent property line except for minimum required front yards and visibility triangles. For construction standards, refer to '*Supplemental Use Standards, Section 5.304C Satellite Antenna (Dish)*'.

#### E. Irrigation Requirements

All bufferyards required under this Section must be irrigated by an underground automatic irrigation system. Provided, however, that, when the total area of the bufferyard is less than 1,000 square feet, an irrigation system shall not be required if there is a working water faucet located no more than 100 feet from every part of the bufferyard.

#### F. Landscaping Requirements

The bufferyard shall be sodded with turf grass or ground cover that will provide the appearance of a finished planting. Minimum landscaping and buffering must be provided as outlined in Paragraph G. The landscaping in the bufferyard shall be protected from vehicular encroachment by curbs, railroad ties, concrete retainers or other permanent barriers.

**G. Point System Requirements**

Bufferyards must earn a minimum of 25 points that are awarded for providing and maintaining specific landscaping and design features. The points are accumulated as follows:

Feature	Points
<b><i>Solid wood screening fence</i></b>	
6 feet in height, single-faced	5
6 feet in height, double-faced	10
8 feet in height, single-faced	10
8 feet in height, double-faced	15
<b><i>Solid masonry wall</i></b>	
6 feet in height	15
8 feet in height	20
<b><i>Combination masonry wall/double-faced solid wood screening fence</i></b>	
6 feet in height	15
8 feet in height	20
<b><i>Bufferyard</i></b>	
Each additional 5 feet in bufferyard width beyond required minimum *	5
3 small ornamental trees for every 50 lineal feet of bufferyard	5
3 small ornamental trees for every 25 lineal feet of bufferyard	10
5 ornamental shrubs for every 25 lineal feet of bufferyard	15
1 tree for every 25 lineal feet of bufferyard (minimum 12 feet in height, minimum trunk caliper of 2½ inches above root ball)	10
<b>NOTE:</b> * For commercial and institutional uses, a 30-foot grass bufferyard shall meet the point system requirements of this Section without providing for a screening fence or irrigation system.	

**H. Permit Requirements**

In order to determine compliance with this Section, an application for a building permit for property that abuts a one- or two-family district shall include a landscaping plan with a planting schedule and a written statement indicating the options that were selected in order to meet the minimum "point" requirements.

**I. Installation and Maintenance**

The owner and/or occupant shall be jointly and severally liable for installing and maintaining all masonry walls, fences and landscaping in a healthy, neat, orderly and physically sound condition and replacing it when deemed necessary by the Planning and Development Department.

**J. Bonus Provisions**

The minimum building setback in rear yards can be reduced by 5 feet in "ER", "E", and "O-M" Districts and ten feet in all other commercial and industrial districts provided that a minimum ten-foot landscaped front yard is provided on the site in accordance with the standards specified in Paragraphs E and F.

**K. Exemptions and Exceptions**

1. Remodeling work that does not increase the existing floor area or the restoration of a building that has been involuntarily damaged or destroyed shall be exempt from the supplemental bufferyard and building setback requirements.

2. When a legal use exists on property and subsequent to establishing such legal use, adjacent property or property across an alley is rezoned to a one- or two-family district, the construction of new buildings and the addition, remodeling, alteration, or total restoration due to involuntary destruction of existing buildings on the property are exempt from the requirements of a bufferyard, screening fence, and supplemental building setback.
3. When a residence is converted to a nonresidential use or when an existing nonresidential use expands the building square footage and/or parking area, then the minimum required bufferyard points shall be reduced to 15 points. If a masonry wall is used to satisfy the minimum point requirements, there shall be no minimum bufferyard width requirement.
4. Nothing herein shall require a bufferyard to be placed on a nonresidential use site where such nonresidential use site is immediately adjacent to a waterway, railroad right-of-way, power transmission or other easement where such right-of-way or easements are at least 50 feet in width, or public street right-of-way at least 300 feet in width.
5. Any area located within an airport operating area, defined as those areas associated with aircraft movement, shall be exempt from the supplemental bufferyard and supplemental building setback requirements.  
(Ord. No. 13896, Eff. 10/12/99; 14556, 03/20/01; 14713, 07/17/01; 15828, 01/13/04; 16184, 10/19/04; 16521, 07/19/05; 17522, 04/24/07; 20453, 10/27/12)

### 6.301 Landscaping Buffers

#### A. Purpose

It is the purpose of this Section to preserve the existing natural environment, conserve water, moderate air temperatures, reduce pollution, and filtration of storm water best practices whenever possible and to provide landscape amenities, setbacks and screening with Texas native and adaptive plants. This Section is also intended to promote a positive urban image by promoting quality development, enhancing property values, providing landscape improvements in all parts of the city, and promoting orderly growth and aesthetic quality in the city.

#### B. Delineation of Artificial Lot

If a developer wishes to develop a portion of a one acre or larger tract, the developer may request that the Planning and Development Director delineate the portion of the tract to be developed as an artificial lot, for purposes of calculating landscape requirements for the development. Artificial lots may be delineated in any type of development, including schools and places of worship. All artificial lots shall meet the following requirements:

1. Contain the entire area on which the development is to occur, including all paved areas;
2. Contain a land area of less than 50 percent of the entire tract, or, if the proposed artificial lot contains more than 50 percent of the entire tract, the Director must determine that a substantial amount of the tract is not affected by the proposed development; and
3. Be delineated on the landscape plan as required in Paragraph C, below.

#### C. Submittal of Landscape Plan

A landscape plan shall be submitted to the Planning and Development Department together with the application for a building permit. The following information shall be shown on the required landscape plan:

1. Calculation of net site area showing all existing and proposed structures, parking and access, other paved areas, and all required bufferyard areas pursuant to this Section;
2. Calculation of required landscape area;
3. Location and dimensions of areas to be landscaped and total amount of landscaped area;
4. Location, number and planting size of all shrubs, and groundcover including both required and actual materials provided;
5. Location and coverage of required irrigation system; and
6. Delineation of artificial lot, if applicable, including depiction of all proposed and existing structures, access drives, appurtenant parking and other paved areas proposed for expansion or new construction.

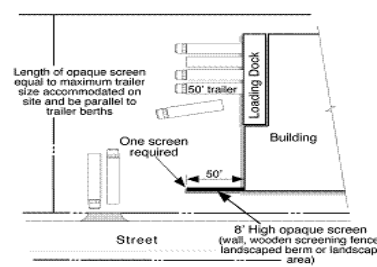
**D. Screening for Commercial and Institutional Uses**

Screening for commercial/institutional uses shall include screening of loading docks, truck berths, refuse handling facilities (including refuse disposal and recycling), and ground level mechanical equipment visible from public right-of-way and is required per the following.

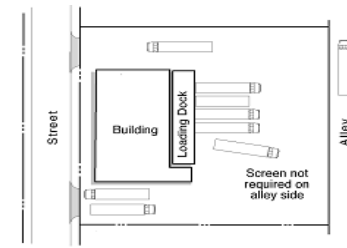
1. Loading docks and truck berths: Opaque walls, wooden screening fences, landscaped berms, or landscape areas all of which must be a minimum of eight feet in height and must screen loading dock areas from view from the public street right-of-way with the greatest pavement width parallel to the trailer berths. Screening shall be of sufficient length to screen the maximum size trailer which can be accommodated on site and shall be parallel to trailer berths.

**EXAMPLE: Docks and berths that accommodate a 50-foot trailer shall be screened with a 50-foot wall parallel to the berth.**

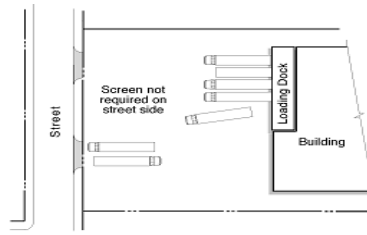
2. Refuse handling facilities and mechanical equipment: Opaque walls or wooden screening fences of not less than the height of the facilities or equipment to be screened are required to screen the view from any public street right-of-way. Permanent walls are required on three sides with an opaque gate allowed on the fourth side.



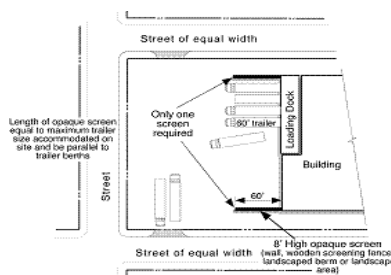
Picture 6.6 Frontage on One Block ([Popup full image](#))



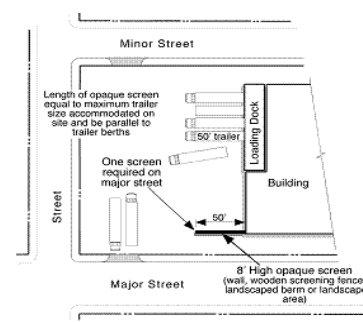
Picture 6.7 Facing Alley ([Popup full image](#))



Picture 6.8 Facing Street ([Popup full image](#))



Picture 6.9 Frontage on Two Streets of Equal Width ([Popup full image](#))



Picture 6.10 Frontage on Major and Minor Streets ([Popup full image](#))

**E. No Paving of Parkway Allowed**

After October 1, 1998, no portion of a parkway shall be paved, except for sidewalks or driveways permitted by Transportation and Public Works Department.

**F. Applicability of Landscape Requirements**

These landscape requirements shall be applicable to the following construction, subject to the exemptions in Paragraph G. below:

1. Construction of new structures for which a building permit is required for any commercial/institutional and industrial uses.
2. Expansions of structures used for commercial/institutional and industrial uses that increase the footprint of existing structures by at least 30 percent, and that add at least 3,000 square feet to existing structures. Expansions that do not meet both the 30 percent and the 3,000 square foot criteria are not subject to these landscape requirements; and
3. Construction of manufactured home parks and recreational vehicle parks for which a permit is required pursuant to Chapter 13-2 of the City Code and private recreation facilities located in manufactured housing subdivisions.

**G. Exemptions from Landscape Requirements**

The following are not subject to these landscape requirements:

1. Structures that do not create or expand building square footage or temporary structures such as job shacks associated with construction activities;
2. Construction or expansion of one-family and two-family dwellings;
3. Construction or expansion of multifamily and mixed use developments subject to Unified Residential development provisions set out in section 6.506;
4. Change in use of an existing structure, unless the structure is expanded in accordance with Paragraph F.2 above;
5. Construction or expansion of structures in the "H" Central Business District.

6. Temporary buildings in place for a maximum of five years and erected as accessory buildings for elementary and secondary schools and institutions of higher education.
7. Any area located within an airport operating area, defined as those areas associated with aircraft movement.

#### H. Landscape Area Required

Construction projects subject to this section shall provide landscape areas calculated as follows.

1. Commercial or Institutional Uses:
  - a. A minimum of ten percent of net site area shall be landscaped by using one of the following methods:
    - i. One shrub, a minimum of five gallons in size, for every 50 square feet, or fraction thereof, of required landscape; or
    - ii. For every 75 square feet, or fraction thereof, of required landscape area, a cluster of native shrubs and or grasses, consisting of a minimum of five (5) plants, three (3) gallon in size and grouped with similar watering requirements from the approved native plant list found in Table A. below. Plants may not exceed four (4) feet in height in the required front yard. Existing natural vegetation shall be preserved when possible.

**Table 6.8 Table A. Recommended List of Native Plants for Landscape Use in North Central Texas**

**Key:** **E**=Evergreen/**D**=Drought resistant in full sun with reflected heat/**P**=Tolerates poor drainage, can be used in parkways and other places where roots are confined and drainage periodically may be poor/**S**=Shade tolerant/**B**=Attracts birds or butterflies/**F**=Very showy in flower, fruit or fall foliage; **FF** indicates more than one showy characteristic/**X**=Cross Timbers or Trinity sands only, not in the Blacklands or limestone.

Native Plants								
Common Name	Key							Scientific Name
Grasses								
	E	D	P	S	B	F	X	
Switchgrass			P		B	F		Panicum virgatum
Big Bluestem		D	P		B	F		Andropogon gerardii
Buffalogarss		D						Buchloe dactyloides
Bushy Bluestem			P		B	F		Androphgon gloeratus
Eastern Gamagrass			P	S				Tripsacum dactyloides
Gulf Muhly			P		B	F		Muhlenbergia capillaris
Indiangrass		D	P		B	F		Sorghastrum natans
Inland Seoats			P	S	B	F		Chasmanthium latifolium
Lindheimer Muhly		D	P		B	F		Muhlenbergia lindheimeri
Little Bluestem		D			B	FF		Schizachyrium scoparium
Seep Muhly		D	P	S	B			Muhlenbergia reverchonii
Sideoats Gama		D			B	F		Bouteloua curtipendula
Splitbeard Bluestem		D	P			F	X	Andropogon ternarius
Shrubs								
Agarito	E	D			B	F		Mahonia trifoliolata
American Beautyberry			P	S	B	F		Callicarpa americana

**Table 6.8 Table A. Recommended List of Native Plants for Landscape Use in North Central Texas**

**Key:** **E**=Evergreen/**D**=Drought resistant in full sun with reflected heat/**P**=Tolerates poor drainage, can be used in parkways and other places where roots are confined and drainage periodically may be poor/**S**=Shade tolerant/**B**=Attracts birds or butterflies/**F**=Very showy in flower, fruit or fall foliage; **FF** indicates more than one showy characteristic/**X**=Cross Timbers or Trinity sands only, not in the Blacklands or limestone.

Native Plants								
Common Name	Key							Scientific Name
Apache Plum		D			B	F		Fallugia paradoxa
Autume Sage		D			B	F		Salvia greggii
Canyon Senna		D				F		Cassia wislizenii
Coralbean		D			B	F		Erythrina herbacea
Coralberry				S	B	F		Symphoricarpus orbiculatus
Dwarf Wax Myrtle	E		P	S	B			Myrica pussila
Flame Acanthus		D			B	F		Anisacanthus wrightii
Fragrant Sumac		D			B	F		Rhus aromatica
Indigobush			P		B	F		Amorpha fruticosa
Mountain Sage				S	B	F		Salvia regla
Pale Leaf Yucca	E	D		S	B	F		Yucca pallida
Red Yucca	E	D	P	S	B	F		Hesperaloe parviflora
Smooth Sumac		D			B	FF		Rhus glabra
Texas Barberry	E	D			B	F		Mahonia swaseyi
Texas Mock Orange						F		Philadelphus texensis
Texas Sage/Cenizio	E	D				F		Leucophyllum frutescens
Turk's Cap		D	P	S	B	F		Malvaviscus drummondii
Virginia Sweetspire			P	S	B	F		Itea virginica
White Honeysuckle Bush				S	B	F		Lonicera albiflora
Groundcover								
Cedar Sage				S	B	F		Panicum virgatum
Frogfruit		D	P		B			Phyla nodiflora
Golden Groundsel		D		S		F		Senecio obovatus
Horseherb				S				Calypocarpis vialis
Lyreleaf Sage	E		P	S		F		Salvia Lyrata
Missouri Violet				S		F		Viola missouriensis
Pigeon Berry			P	S	B	F		Rivina humilis
Virginia Creeper			P	S	B	F		Parthenocissus quinquefolia



**Table 6.8 Table A. Recommended List of Native Plants for Landscape Use in North Central Texas**

**Key:** E=Evergreen/D=Drought resistant in full sun with reflected heat/P=Tolerates poor drainage, can be used in parkways and other places where roots are confined and drainage periodically may be poor/S=Shade tolerant/B=Attracts birds or butterflies/F=Very showy in flower, fruit or fall foliage; FF indicates more than one showy characteristic/X=Cross Timbers or Trinity sands only, not in the Blacklands or limestone.

Native Plants								
Common Name	Key							Scientific Name
Wood Fern				S				Thelypteris kunthii
Vines								
Carolina Jessamine	E		P		B	F		Gelsemium sempervirens
Climbing Prairie Rose			P		B	F		Rosa setigera
Coral Honeysuckle			P		B	F		Lonicera sempervirens
Crossvine	E		P	S	B	F		Bignonia capreolata
Passion Flower			P	S	B	F		Passiflora incarnata
Virginia Creeper			P	S	B	F		Parthenocissus quinquefolia
Adaptive								
White Yarrow	E	D	P		B	F		Achillea millifolium
Butterfly Bush					B	F		Buddleja spp
Mexican Bush Sage		D			B	F		Salvia leucantha
Mexican Oregano	E	D			B	F		Poliomenantha longiflora
Ox-Eyed Daisies	E		P		B	F		Chrysanthemum leucanthemum

Source: North Central Texas Council of Governments

- b. All landscaped areas shall:
  - i. be located outside the perimeter of the footprint of a building or structure;
  - ii. protected by wheel stops, curbs or other physical barriers where adjacent to vehicle use areas; and
  - iii. be covered with grass, organic mulch or low maintenance groundcover.
- c. A minimum of 75% of all required landscape area shall be located in the front yard between the building line and the front property line. For lots with multiple street frontages, a minimum of 75% of all required landscape shall be located in the yard adjacent to the street with the greatest pavement width. The Planning and Development Director may approve a 5% modification to the percentage requirement. When an artificial lot or a building expansion is separated from property adjacent to a street frontage, the required landscape areas may be located anywhere on the subject to the perimeter footprint of a building or structure.
- d. Landscaped Bioretention areas are encouraged for natural drainage channels to reduce runoff and increase infiltration of water into the soil.
- e. The minimum percentage of the landscape area required in the front yard between the building line and the front property line may be reduced to 50% provided that native/adapted plants are used in conjunction with storm water quality facilities as approved by the Department of Transportation and Public Works and as provided in the Storm Water Quality Manual.

2. Industrial Uses and Manufactured Home Uses:
  - a. A minimum of four percent of net site area, or, at the option of the developer, a landscape area at least 30 feet in depth along the length of the property line frontage on all public right-of-way adjacent to the property shall be landscaped by using one of the following methods:
    - i. For every 50 square feet, or fraction thereof, of required landscape area, one shrub a minimum of five gallons is required, or
    - ii. For every 75 square feet, or fraction thereof, of required landscape area, a cluster of native shrubs and or grasses, consisting of a minimum of five (5) plants, three (3) gallon in size and grouped with similar watering requirements, from the approved native plant list found in Appendix F. "Landscaping", of the City's Storm Water Manual. Plants may not exceed four (4) feet in height in the required front yard. Existing natural vegetation shall be preserved when possible.
  - b. All landscaped areas shall:
    - i. be located outside the perimeter of the footprint of a building or structure;
    - ii. protected by wheel stops, curbs or other physical barriers where adjacent to vehicle use areas; and
    - iii. be covered with grass, organic mulch or low maintenance ground cover.
  - c. A minimum of 75% of all required landscape area shall be located in the front yard between the building line and the front property line. For lots with multiple street frontages, a minimum of 75% of all required landscape shall be located in the yard adjacent to the street with the greatest pavement width. The Planning and Development Director may approve a 5% modification to the percentage requirement. When an artificial lot or a building expansion is separated from property adjacent to a street frontage, the required landscape areas may be located anywhere on the subject to the perimeter footprint of a building or structure.
  - d. Landscaped Bioretention areas are encouraged for natural drainage channels to reduce runoff and increase infiltration of water into the soil.
  - e. The minimum percentage of the landscape area required in the front yard between the building line and the front property line may be reduced to 50% provided that native/adapted plants are used in conjunction with storm water quality facilities as approved by the Department of Transportation and Public Works and as provided in the Storm Water Quality Manual.

**I. Irrigation**

A permanently installed irrigation system shall be installed to provide total water coverage to all plant materials installed pursuant to this Section.

1. A permanently installed irrigation system shall be installed to provide total water coverage to all plant materials installed.
2. A temporary irrigation system shall be installed for new native plantings for up to one year in order to establish root systems.
3. A drip irrigation system as required by the City's Water Department (Water Conservation Manual, Section 35-162 of the City Code) shall be installed for native and adaptive plant material in new commercial and industrial planting beds less than five (5) feet in width.

**J. Modification of Landscape Requirements**

The Planning and Development Director or a designee may approve minor variations in the location of required landscape materials due to unusual topographic constraints, sight restrictions, sitting requirements, preservation of existing stands of native trees or similar conditions, or in order to maintain consistency of established front yard setbacks. These minor changes may vary the location of required landscape materials, but may not reduce the amount of required landscape area or the required amount of landscape materials. The landscape plan shall be submitted and shall specify the modifications requested and present a justification for such modifications.

**K. Installation and Maintenance**

1. All landscape materials shall be installed within 90 days after issuance of a Certificate of Occupancy. Such 90-day period may be extended for an additional 90 days by the Planning and

Development Director. Upon completion of installation of all plant materials, the owner or agent shall notify the Planning and Development Department of completion of installation and shall request inspection. Verification by the Planning and Development Department of installation in compliance with this Section shall be required.

2. The owner shall maintain all landscape materials in good condition in accordance with the terms of this Section.

**L. Variances by Board of Adjustment**

1. As provided by state law, the Board of Adjustment may grant variances to the provisions of this section only if the variance is not contrary to the public interest and, due to special conditions, a literal enforcement of the Section would result in unnecessary hardship, and so that the spirit of the Section is observed and substantial justice is done. As provided by state law, a "hardship" does not include financial hardship resulting from compliance with the landscape provisions.

2. The City Manager or his/her designee shall report monthly to the City Council any variances granted to this Section.

(Ord. No. 13896, Eff. 10/12/99; 14557, 09/18/01; 14894, 12/11/01; 14987, 02/19/02; 15850, 01/27/04; 16184, 10/19/04; 16269, 01/18/05; 16270, 01/18/05; 17228, 10/03/06; 17367, 01/09/07; 17522, 04/24/07; 18615, 05/12/09; 18746, 08/14/09)

### 6.302 Urban Forestry

#### A. Purpose

It is the purpose of this section to achieve thirty percent (30%) tree canopy coverage citywide and to promote a multi-aged urban forest. This may be accomplished by addressing the preservation and protection of healthy and significant trees, providing for the replacement and replanting of trees that are removed during development, and establishing additional tree canopy.

#### B. Applicability of Urban Forestry Requirements

These requirements shall be applicable to all development as described below, unless subject to the exemptions in Paragraph C:

1. Removal of any trees of six (6) inches or greater in diameter.
2. Construction of new structures for which a building permit is required.
3. Expansion of structures used for commercial/institutional and industrial uses that increase the footprint of existing structures by at least thirty percent (30%) or add at least three thousand (3,000) square feet to existing structures.
4. Clearing of all or a portion of property, including grading or construction of a new parking lot.
5. Subdivision of land greater than one acre for the construction of one- or two-family dwellings, including contiguous lots with the same owner that total more than one acre.
6. Construction of manufactured home parks and recreational vehicle parks for which a permit is required and private recreation facilities located in manufactured housing subdivisions.
7. Mixed Use (MU) zoned properties. These properties must provide, through either preservation or planting, fifty percent (50%) canopy coverage of required open space.
8. New agricultural development that requires tree removal.
9. Public projects that will physically change the surface or will include removal of trees six (6) inches or greater.

#### C. Exemptions from Urban Forestry Requirements

The following are not subject to Urban Forestry requirements:

1. Structures that do not create or expand building square footage or temporary structures such as job shacks associated with construction activities, when no trees greater than six (6) inches are removed;
2. Any single residential lot with a one- or two-family dwelling that is one (1) acre or less in size.
3. Change in use of an existing structure, unless the structure is expanded in accordance with Paragraph B.3 above;
4. Any area within a design district unless the standards for that district do not address urban forestry.
5. Construction or expansion of structures in the "H" Central Business District.
6. Any area located within an airport operating area as defined by Section 3-1 of the City Code.
7. Any tree that is deemed to be in unsafe condition, or is injurious to common good, or to electrical, gas or water utilities, or sewer pipes, pavement or improvements, or is infested and dangerous to other trees or conflicts with other ordinances or regulations.
8. Gas well sites and natural gas pipeline compressor stations, except as outlined in Chapter 15, Gas Drilling of the City Code.

#### D. General Requirements

The following requirements apply to all development:

##### 1. Tree Protections and Maintenance:

- a. Procedures required prior to development activities:
  - i. Protective Fencing: Prior to development activities, the contractor or subcontractor shall construct and maintain, for each preserved tree or tree cluster on a tract, a protective fence which encircles the outer limits of the critical root zone of the tree to protect it from development activities. All protective

fencing shall be in place prior to commencement of any site work and remain in place until all exterior work has been completed. Fencing shall meet the state minimum standards of a four (4) foot orange plastic mesh net with t-posts, including a top rail or other type of support. Significant trees shall be protected with a minimum four (4) foot chain link fence with support cables and t-posts.

- ii. **Bark Protection:** In situations where a preserved tree remains in immediate area of intended construction and the City Forester determines the tree bark to be in danger of damage by development activities, the contractor or subcontractor shall protect the tree by enclosing the entire circumference of the tree with two-inch by four-inch (2" x 4") lumber encircled with wire or other means that does not damage the tree. The intent is to protect the bark of the tree against incidental contact by large construction equipment.
  - iii. **Canopy Coverage Protection:** All trees being preserved for canopy coverage under Section 6.302.G.4. or a Significant or Large Tree covered under Section 6.302G.5. due to size will be protected during any development activities. Development activities will include vegetation removal, grading, demolition, installation of utilities and/or construction of structures and site amenities.
  - b. Protective measures (as defined in this section) must occur on all trees located within fifty (50) feet of development activities.
  - c. Protective measures are required within the critical root zone radius from the trunk at one (1) foot per inch diameter measured at Breast Height (DBH).
  - d. The following activities within the critical root zone are prohibited:
    - i. No material intended for use in construction or waste material accumulated due to excavation or demolition shall be placed within the limits of the critical root zone of any preserved tree;
    - ii. No equipment shall be cleaned or other liquids deposited or allowed to flow overland within the limits of the critical root zone of a preserved tree. This includes, without limitations, paint, oil, solvents, asphalt, concrete, mortar or similar materials;
    - iii. No signs, wires or other attachments, other than those of a protective nature, shall be attached to any preserved tree;
    - iv. No vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any Preserved Tree other than on existing street pavement; or
    - v. No heavy equipment, including but not limited to trucks, tractors, trailers, bulldozers, bobcat tractors, trenchers, compressors and hoists shall be allowed inside the critical root zone of any preserved tree on any construction site without the specific approval of the City Forester;
    - vi. No grade change within the critical root zone of any Preserved Tree without submission of a certified arborist/forester report dealing with protections and the report acceptance by the City Forester;
    - vii. No filling activity in the critical root zone of any Preserved Tree may occur as a permanent condition which may damage the tree. Tree wells may be used to ensure that the root zone is protected.
  - e. Replacement of any Preserved Tree which dies within five (5) years due to construction or development activities will be the responsibility of the original applicant. Replacement will be new trees with a minimum of three (3) inches each in diameter and equal to five (5) times the lost canopy. Tree replacement will be guaranteed for an additional period of two (2) years.
- 2. Construction Methods:**
- a. **Boring:** Boring of utilities under preserved trees shall be required in those circumstances where it is not possible to trench around the critical root zone of the preserved tree. When required, the length of the bore shall be the width of the critical root zone at a minimum and shall be a minimum depth of forty-eight (48) inches.

- b. Grade change: In situations where the City Forester approves a grade change within the critical root zone of a preserved tree, procedures and special conditions shall be approved by the City Forester in advance of any work.
  - c. Trenching: All trenching shall be designed to avoid trenching across the critical root zone of any preserved tree, unless otherwise approved by the City Forester. All work within the critical root zone requires advance approval by the City Forester. The placement of underground utility lines such as electric, phone, gas, etc., is encouraged to be located outside the critical root zone of preserved trees. Trenching for an irrigation system shall be placed outside the critical root zone, except into the critical root zone perpendicular to the tree trunk and in the manner that has the least possible encroachment into the critical root zone. Boring is required for all underground utility lines that cross the critical root zone.
  - d. Root pruning: All roots two inches or larger in diameter which are exposed as a result of trenching or other excavation shall be cut off square with a sharp medium tooth saw and covered with pruning compound within two (2) hours of initial exposure.
  - e. Underground utilities: All onsite underground utilities with backfill other than onsite material shall have a clay dam every two hundred (200) feet for the entire length of the utility placement.
  - f. Paving: No paving is allowed within the critical root zone of any preserved tree unless otherwise approved by the City Forester. Approvals will be based upon best management practices for tree preservation.
- 3. Tree planting to achieve the goal of canopy coverage:**
- a. Trees planted to provide canopy coverage shall be a minimum of two and one-half to three inches (2.5" to 3") each in diameter and will be credited its canopy coverage at normal maturity. These credits are as follows:
    - i. Large canopy tree with typical crown width of fifty (50) feet in diameter--two thousand (2,000) square feet (minimum spacing of forty (40) feet on center);
    - ii. Medium canopy tree with typical crown width of thirty (30) feet in diameter—seven hundred (700) square feet (minimum spacing of twenty-four (24) feet on center);
    - iii. Small canopy tree with typical crown width of ten (10) feet in diameter—one hundred (100) square feet (minimum spacing of eight (8) feet on center).
  - b. Tree planting requirements: Table H is a list of desirable and adapted trees for the Fort Worth area. Other trees other than those in Table H will be considered by the City Forester and granted on a case-by-case basis. The approval of additional species will be judged on adaptability, long-term health and growth characteristics of the tree type.
  - c. The minimum size of tree planted will be two and one-half to three inches (2.5" to 3") in diameter. The caliper measurement of the trunk shall be taken at a point six (6) inches above the ground if the resulting measurement is no more than four (4) inches in diameter. If the resulting measurement is more than four (4) inches, the measurement of the caliper shall be taken at twelve (12) inches above the ground. If the tree is multi-trunk, the main stem will be given full credit for its diameter and all other stems will receive one-half (1/2) credit. The total of all must be three (3) inches or greater.
  - d. All newly planted trees that die within two (2) years of the date of project completion will be replaced. The replacement tree carries the same two (2)-year replacement requirement. The requirement to replace the trees shall run with the land.
  - e. A minimum of sixteen (16) square feet of permeable surfaces must be provided for all tree plantings.
  - f. Expansion of structures used for commercial/institutional and industrial uses: Tree plantings to achieve canopy coverage will be based only on the square footage of the expansion footprint rather than the entire site to ensure at least minimal tree replacement. Only tree removal permits for trees greater than six (6) inches in diameter are required for expansions under three thousand (3,000) square feet.

**4. Warranty/Replacement:**

Any preserved tree that dies or becomes hazardous and a threat to public safety or property due to construction activities within five (5) years following the date of issuance of the Certificate of Occupancy shall be replaced following the criteria outlined above for tree preservation and significant tree replacement by the original applicant or assigned party.

**5. A Certificate of Occupancy shall not be issued until the requirements of Section 6.302.G. are met.****E. Specific Requirements based on Land Use**

The City's goal to achieve a city-wide tree canopy cover of at least thirty percent (30%) and to promote the functional distribution of that canopy throughout various land uses as development occurs through a combination of planting and retention goals and requirements for tree canopy cover. In support of the overall goal of tree canopy cover for the City, the following land use requirements shall apply:

**1. One-and two-family residential land uses:**

- a. Minimum retained or planted canopy coverage shall be forty percent (40%).
- b. Canopy for New Subdivisions:  
The forty percent (40%) canopy coverage requirement for one- and two- family residential land uses will be reduced to twenty-five percent (25%) if:
  - i. One tree per residential lot is planted on all lots up to five thousand (5,000) square feet in area;
  - ii. One additional tree for each additional five thousand (5,000) square feet of lot area, or fraction thereof is planted, up to a maximum of nine trees per residential lot; and
  - iii. The remaining portion of the twenty-five percent (25%) canopy coverage may be provided in public rights-of-way, parks, homeowner association lots or boundary street parkways.
- c. Phased Development of Residential subdivisions:  
Residential subdivisions that are to be developed in phases must provide a plan that complies with the retention requirements at full build-out as approved on the preliminary plat. If a final plat requests credit for trees in undeveloped phases or units that are planned for future development, it will be necessary for all subsequent plats to identify trees for retention or provide mitigation as needed to obtain the required canopy coverage percentage. Updated plans must be provided to Urban Forestry as the subdivision is developed.
- d. Canopy for Existing Platted Residential Lots over one acre:
  - i. retained canopy coverage of twenty-five percent (25%);
  - ii. overall canopy coverage of forty percent (40%).

**2. Multifamily land uses:**

- a. Minimum retained or planted canopy coverage shall be fifty percent (50%) of open space.

**3. Institutional land uses:**

- a. Minimum retained or planted canopy coverage shall be thirty percent (30%).

**4. Commercial land uses:**

- a. Minimum retained or planted canopy coverage shall be thirty percent (30%).

**5. Mixed Use land uses in MU Mixed-Use Zoning:**

- a. Minimum retained or planted canopy coverage shall be fifty percent (50%) of open space.

**6. Industrial land uses:**

- a. Minimum retained and planted canopy coverage shall be twenty percent (20%).

**7. Surface parking areas:**

- a. Minimum canopy coverage shall be forty percent (40%).
- b. The canopy coverage shall be achieved through preservation of existing trees or tree planting within the parking field and drives;
- c. No requirement for one- and two-family residential uses;

- d. Credit shall be given for preserved or planted trees located outside the subject property within the parkway of adjacent streets.
- i. Trees planted to provide canopy coverage shall be a minimum of three inches each in diameter and will be credited its canopy coverage at normal maturity. These credits are as follows:
  - a. Large canopy tree with typical crown width of fifty (50) feet in diameter—two thousand (2,000) square feet (minimum spacing of forty (40) feet on center);
  - b. Medium canopy tree with typical crown width of thirty (30) feet in diameter—seven hundred (700) square feet (minimum spacing of twenty-four (24) feet on center);
  - c. Small canopy tree with typical crown width of ten (10) feet in diameter—one hundred (100) square feet (minimum spacing of eight (8) feet on center).

**8. Public projects (e.g. water, sewer, street, or drainage):**

- a. Minimum retained and planted canopy coverage shall be thirty percent (30%);
- b. Public projects may elect to mitigate required canopy coverage through payment into the tree fund at a rate of six hundred dollars (\$600.00) per required tree. No mitigation or payment in to the tree fund shall be required if the public project does not prevent the surface from being restored to its original condition or where the public project will not require tree removal.

**9. Agricultural land uses:**

- a. Minimum canopy retention shall be twenty-five percent (25%);
- b. New agriculture development will require documentation of the existing canopy coverage and a detailed tree survey of the property prior to clearing or grading of the property. The tree survey will include the location, size and species of tree. At the time of development a payment of two hundred dollars (\$200.00) per diameter inch will be required for up to twenty-five percent (25%) of the removed trees over six (6) inches in diameter. The canopy coverage and total diameter inch total will run with the land provided approved documentation is recorded in the applicable county deed records.

**F. Delineation of Artificial Lot**

If a developer wishes to develop a portion of a one acre or larger tract, the developer may request that the Planning and Development Director delineate the portion of the tract to be developed as an artificial lot, for purposes of calculating Urban Forestry requirements for the development. Artificial lots may be delineated in any type of development, including schools and places of worship. All artificial lots shall meet the following requirements:

- 1. Contain the entire area on which the development is to occur, including all paved areas;
- 2. Contain a land area of less than fifty percent (50%) of the entire tract, or, if the proposed artificial lot contains more than fifty percent (50%) of the entire tract, the Director must determine that a substantial amount of the tract is not affected by the proposed development; and
- 3. Be delineated on the Urban Forestry Plan as provided in Subsection G, below.

**G. Urban Forestry Plan/Permits**

No activity subject to the Urban Forestry Requirements shall be conducted without the required permit for such activity, as further described below:

**1. Permits:**

- a. Tree Removal Permit is required:
  - i. prior to the removal of a single tree. No permit shall be issued if the remaining canopy coverage is less than the twenty-five percent (25%) minimum retention; or
  - ii. for the removal of any tree six (6) inches or greater in diameter.
- b. Urban Forestry Permit is required:
  - i. for the removal of more than one (1) tree;
  - ii. for construction of new structures on properties where a building permit is required, unless exempted under Section 6.302.C.
- c. An Urban Forestry Plan is required to be submitted with the Urban Forestry Permit.



- d. An approved Urban Forestry Permit will run with the land. If the project scope or configuration changes prior to any disturbance of the land, the approved Urban Forestry Permit is invalid and the owner/developer shall apply for a new permit.
- e. An Urban Forestry Permit shall expire on the fifth anniversary of the date the permit was issued if no progress has been made toward implementation of the Urban Forestry Plan.

**2. Urban Forestry Plan:**

Submission of an Urban Forestry Plan is required for the issuance of an Urban Forestry Permit and is required before or at the time of application for building permit. At the time of submission of the Urban Forestry Plan, the applicant shall elect a method of preservation of existing canopy under Section 6.302.G.4.

If no trees exist on the site, the applicant shall document the existing conditions and comply with Urban Forestry Plan Application Requirements below, but shall not be required to elect a method of preservation of existing canopy under Section 6.302.G.4.

**3. Urban Forestry Plan Application Requirements:**

Prior to any platting activity, site plan preparation and submission for development, demolition, disruptive activities (including clearing and grading) or tree removal, the following information must be submitted through a two-part process:

- a. Part One: Documentation of Existing Conditions:
  - i. The first submittal shall include two (2) copies of a scaled diagram of the subject property in which development, disruption or tree removal is proposed. The scaled diagram may be an engineered drawing, survey, air photo or other illustration. Part One will reflect the existing conditions by including the following information:
    - a. Boundaries of the property and its calculated area i.e. acres, square feet;
    - b. Location map showing the proximity of the property to the nearest streets;
    - c. Outline of the existing tree canopy area on the property and the calculated area (square feet or acres) of existing canopy coverage. Properties with no existing canopy shall indicate such conditions;
    - d. Scaled existing or proposed utilities regulated by the Public Utility Commission, and/or Texas Railroad Commission. Indicate the calculated area (square footage or acres) for these rights of ways or easements;
    - e. Location of each Significant or Large Tree as defined in Chapter 9, its species and canopy area;
    - f. Tables B, C, D, and E in Section 6.302.L.
  - ii. Upon completion and approval of Part One documentation, tree removals will be granted if a minimum of fifty percent (50%) of the existing tree canopy is retained. The documentation of pre-development canopy coverage shall be maintained with the property until development occurs. The required retention indicated in Part One documentation will be achieved within the area remaining after the initial clearing.
  - iii. Part One documentation shall expire on the second anniversary of the date of approval if no progress has been made toward completion of a Part Two submission.
- b. Part Two: Components of the Urban Forestry Plan:

Part Two will overlay the proposed improvements and removals/preservations/ plantings. Two (2) copies shall be provided and shall include the following information:

  - i. Scaled site plan depicting the location of proposed structures, parking areas, drives and amenities;
  - ii. Tree canopy areas that are desired to be removed;
  - iii. Location and description of trees (large, medium or small canopy crown) that will be planted from Table F to reach the minimum canopy as stated in 6.302E;
  - iv. Tables G and H in Section 6.302.L.

**4. General Preservation Methods of Tree Canopy**

At the submission of an Urban Forestry Plan/Permit Application, the applicant shall elect one of the following tree preservation of existing canopy compliance methods:

**a. Method "A": *Preservation of existing canopy coverage regardless of tree species:***

- i. At least twenty-five percent (25%) of the existing canopy coverage must be retained, regardless of tree species, on all properties greater than one acre, provided however, Significant or Large Trees must be preserved as outlined in Section 6.302.G.5. The existing canopy can be determined via recent air photo, on the ground survey or other approved method by the City Forester;
- ii. Property located in floodplains or located in areas that will be dedicated to public spaces may be counted toward the required twenty-five percent (25%) minimum retention;
- iii. Calculation of all canopy coverage and retention areas will not include utility rights-of-way or easements covered under the rules and regulation of the public utility commission, and/or Texas Railroad Commission;
- iv. To remove more than the minimum retention will require a waiver from the Urban Design Commission;
- v. The overall canopy coverage percentage requirement must be met by planting the size and species of Protected Trees in Table A, "Protected Trees", in Section 6.302.L.

**b. Method "B": *Preservation of existing canopy coverage using Protected Trees only.***

Protected Trees must be on the site to use this method. See Table A of Section 6.302.L. for a list of Protected Trees:

- i. For property greater than one acre, at least twenty-five percent (25%) of the Protected Trees must be retained, provided however, Significant or Large Trees must be preserved as outlined in Section 6.302.G.5. The total overall retained and planted canopy coverage for the applicable land use must meet a total of five percent (5%) over the required minimum canopy coverage. (e.g. residential coverage would be a minimum of forty-five percent (45%), commercial coverage would be a minimum of thirty-five percent (35%) and industrial would be a minimum of twenty-five percent (25%);
- ii. An onsite tree survey noting the location, size and species (diameter of trees six (6) inches or greater) and canopy coverage of each Protected Tree with a diameter of six (6) inches or greater will be required. This survey shall be completed and signed/sealed by one of the following: Texas licensed Landscape Architect, Certified Arborist, Texas licensed Landscape Contractor or Texas Certified Nurseryman.

**5. Preservation of Significant or Large Trees**

- a. Significant or Large Trees twenty-seven (27) inches in diameter (84.82 inches in circumference) for the entire city or eighteen (18) inches in diameter (56.55 inches in circumference) for Post Oaks and Blackjack Oaks east of Interstate Highway 35W can only be removed by permit of the City Forester. The reduced diameter for Post Oaks and Blackjack Oaks east of IH 35W is in recognition of the naturally occurring Post Oak Savannahs within the Cross Timbers Zone. Preservation of a significant or large tree will be credited to the required canopy cover one and one-half (1½) times the actual canopy size.
- b. Significant or Large Trees may be removed if one of the following conditions is met:
  - i. An area one and one-half (1½) times the area of the canopy of the tree identified for removal is retained on the same site. The one and one-half (1½) retention of existing trees shall be of the same species as the tree being removed in the Post Oak Savanna as indicated on Exhibit "A" or from the protected list if not in the Post Oak Savanna and be in excess of the required tree coverage on the site/tract; or
  - ii. Planting of new trees from the preferred list (see Table F of Section 6.302.L.) at five (5) times greater in canopy area than the removed specific tree canopy. The

additional planting of five to one (5 to 1) will be in excess of the required tree coverage on the site; or

- iii. Payment into the tree fund based upon the total diameter of the specific tree times two hundred dollars (\$200.00) per diameter inch, or four and 94/100 dollars (\$4.94) per square foot of canopy; or
- iv. Urban Design Commission approves a plan that mitigates the removal of Significant or Large Trees.

#### **6. Urban Forestry Plan Amendments**

- a. Minor Amendments: Minor amendments to an approved Urban Forestry Plan may be approved administratively if one of three conditions below is met:
  - i. An increase in the total canopy;
  - ii. Adjustments in the type of tree to be planted, considering that trees from the list of preferred trees must be replaced with trees from said list;
  - iii. Any adjustments in planting location required due to site specific issues including traffic circulation, safety, drainage or utilities, given that the adjustments include only the relocation of trees of the same type and size as provided on the approved Urban Forestry Plan. These adjustments cannot include the removal or transplantation of a tree not considered in the approved Urban Forestry Plan.
- b. Amendments that do not meet any of the conditions in subsection a. of this section must be submitted to and approved by the Urban Design Commission before construction begins.

### **H. Urban Forestry Development Agreement**

#### **1. The Urban Forestry Development Agreement ("Agreement")**

- a. The Agreement is intended to facilitate the development of large tract developments, other than single family or two-family developments, under common ownership which would meet or exceed an overall canopy coverage of thirty percent (30%) for all properties included in the Agreement. The intent of a development agreement is to allow areas with more extensive canopy to remain and contribute to the thirty percent (30%) overall coverage while allowing the canopy in other development areas to be reduced. Individual properties that are subject to the Agreement are required to maintain canopy coverage requirements for different land use types as outlined in Subsection c. below.
- b. The original application for an Agreement shall include an initial spreadsheet of minimum canopies and acreages, the form of which is provided in Table I of Section 6.302.L. Thereafter, Table J of Section 6.302.L shall be completed with the provided canopies and acreages included at the time of each subsequent submittal as property/tracts are being developed. These updates shall be provided at the time of submittal of each Individual Part One document. No approval shall be granted nor tree removals to be completed without the submission of the Table J form as set forth in Section 6.302.L.
- c. The Agreement must be presented to the City Council for approval prior to its execution. Any amendments may be approved administratively if the regulations of this subsection are satisfied. The initial submission for approval of an Agreement shall include:
  - i. A map all of the properties to be included in the Agreement, identified by land use and acreage;
  - ii. Individual maps of each land use type (commercial, industrial, etc.); and
  - iii. Table I of Section 6.302.L.

#### **2. Overall Part One Permit**

An Overall Part One permit as part of an Agreement will be issued if the following conditions are met:

- a. Minimum acreage allowed shall be one thousand (1,000) acres with all of the acres to be located within the same watershed. Applicant shall provide an exhibit depicting all of the property/tracts and acreages that will be subject to the Agreement.
- b. The property/tracts subject to the Agreement shall be separated by land use type, but shall not include single family or two-family development. Applicant will provide

exhibits for each land use type for the initial submittal and will update for subsequent submittals. Canopy requirements will be tracked by land use type.

- c. The minimum canopy coverage for each tract described in an Agreement shall be:

<b>Commercial</b>	15%	<b>Parking</b>	40%
<b>Industrial</b>	10%	<b>Parking</b>	20%
<b>Airport Industrial</b>	5%	<b>Parking</b>	20%
<b>Multifamily</b>	25% of required open space		

- d. All of the acreage to be included in an Agreement shall be under common ownership at the time of the agreement, under a currently approved Overall Part I, or part of an approved concept plan or preliminary plat. A list shall be provided of any separate corporations to be included in an Agreement documenting that all are part of the same parent company. The list shall be provided with the initial Overall Part I submission and shall provide the filing number associated with the Articles of Incorporation filed with the Texas Secretary of State.
- e. The Overall Part One permit shall not expire for a period of fifteen (15) years and may be renewed for additional ten (10) year periods. Renewals will be approved administratively if the permit remains under the same terms and conditions of the original Agreement approved by the City Council or with amendments approved administratively. Progress shall be defined as the platting, permitting, or vertical construction on the properties. The expiration period in Section 6.302.G.3.a.iii. shall apply to the Individual Part One submissions. Individual Part One permits shall be defined as property/tracts that are submitted for approval after the date of execution of the Agreement.
- f. The Agreement shall run with the land and properties which are included in the original Agreement and subsequently sold shall remain under the terms of the Agreement regardless of future ownership. The Agreement shall be recorded in the real property records in the county which the property subject to the agreement is located. Recordation shall be the responsibility of the applicant, including the cost of recording fees. Within fourteen (14) days after execution and recordation, a copy of the recorded documentation shall be provided to the City. The Part One permit shall not be issued until the recorded copy is received.
- g. Future acquired properties by the original applicant of the Agreement may be included in the Agreement after a recalculation of the canopy coverage and approval by Staff if the conditions of this section are met. Acquired properties not included in the Agreement shall be subject to the regulations of Section 6.302. Additional properties may not be included into the Agreement within three (3) years of the end of the initial term of the Agreement. No properties shall be allowed to be added to the Agreement during any renewal terms.

#### **I. Appeals**

1. If the City Forester, or other city official, refuses to accept or issue an Urban Forestry Plan/permit, or if the applicant disagrees with the decision of City staff, the applicant may request an appeal of the decision to the Urban Design Commission within ten (10) days after the decision of City Staff. The appeal shall be in writing and shall be transmitted to the executive secretary of the Urban Design Commission within ten days after receipt of notification that the City Forester will not accept the Urban Forestry Plan/permit.
2. The Urban Design Commission shall consider the appeal within thirty (30) days after the appeal is received by the board's executive secretary, unless the applicant requests a later hearing in writing. The Urban Design Commission shall not release the applicant from the requirements of this ordinance, unless the applicant first presents credible evidence from which the Urban Design Commission can reasonably conclude application of this ordinance to the applicant would be likely to deprive the applicant of rights protected by law.
3. The Urban Design Commission may take the following actions on an appeal:

- a. Deny the appeal, in which case the Urban Forestry Plan/permit shall not be accepted or granted; or
  - b. Grant the appeal, and direct the City Forester to accept and approve the Urban Forestry Plan/permit; or
  - c. Grant the appeal subject to such provisions, conditions, or limitations as deemed appropriate by the Urban Design Commission.
4. In no event shall acceptance of an application guarantee that the City will issue the Urban Forestry Plan/permit, unless the permit application is in compliance with all applicable codes, laws and regulations.
  5. Appeals of the Urban Design Commission will be heard by the District Court.

**J. Penalty**

1. Any person, firm, or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this ordinance may be:
  - a. Assessed a penalty of two hundred dollars (\$200.00) per diameter inch of all trees, regardless of size, removed or damaged without a valid Urban Forestry Permit and/or Tree Removal Permit, four hundred dollars (\$400.00) per diameter inch of Significant or Large Tree removed or damaged without a valid Urban Forestry Plan or permit, and/or
  - b. Issued a citation for a misdemeanor and upon conviction shall be fined not more than five hundred dollars (\$500.00) for the removal or damage of each tree.
2. Where illegal tree removal has occurred and the physical evidence has been removed from the site, a penalty will be assessed based on calculations using aerial photographs available to the City, calculated at a rate of four and 94/100 dollars (\$4.94) per square foot of illegally removed canopy for all trees regardless of size or nine and 88/100 dollars (\$9.88) per square foot of Significant or Large Trees removed or damaged.
3. Any person in a one-family or two-family residentially zoned district who removes or causes to be removed trees without first obtaining the required permit may be issued an after-the-fact permit. An after-the-fact permit shall be issued if:
  - a. The applicant can demonstrate that the criteria for removal in the after-the-fact application would meet the regulations in effect at the time the tree was removed; and
  - b. The applicant has paid the fee for an after-the-fact permit which shall be double the fee of a tree removal permit.

A citation may be issued for a misdemeanor and upon conviction shall be fined not more than five hundred dollars (\$500.00) for the removal or damage of each tree.

If the applicant cannot demonstrate that the criteria for removal in the after-the-fact application would have met the current regulations, then an after-the-fact permit shall not be issued and the person shall be in violation of this section, subject to both criminal and civil penalties.

A second after-the-fact permit shall not be issued if:

- a. another violation of this section occurs by a person previously issued an after-the-fact permit; or
- b. the after-the fact permit was issued on the same site on which an after-the-fact permit was issued within five years of the date of the second violation.

**K. Enforcement**

Any Code Compliance Officer, the City Forester or his/her designee shall have the authority to enforce the provisions of this ordinance.

## L. Tables

Table 6.9 TABLE A. Protected Trees	
Redbud	<i>Cercis canadensis</i>
Mexican Plum	<i>Prunus mexicana</i>
Cherry Laurel	<i>Prunus caroliniana</i>
Eve's Necklace	<i>Sophora affinis</i>
Crab Apple	<i>Malus angustifolia</i>
Bradford Pear	<i>Pyrus calleryana</i> var. <i>Bradford</i>
Golden Raintree	<i>Koelreuteria paniculata</i>
Caddo Maple	<i>Acer barbatum</i> var. <i>Caddo</i>
Red Maple	<i>Acer rubrum</i>
Bigtooth Maple	<i>Acer grandidentatum</i>
Bur Oak	<i>Quercus macrocarpa</i>
Chinquapin Oak	<i>Quercus muhlenbergii</i>
Live Oak	<i>Quercus virginiana</i>
Shumard Red Oak	<i>Quercus shumardii</i>
Texas Red Oak	<i>Quercus texana</i>
Post Oak	<i>Quercus stellata</i>
Blackjack Oak	<i>Quercus marilandica</i>
Pecan	<i>Carya illinoensis</i>
Lacebark Elm	<i>Ulmus parvifolia</i>
Cedar Elm	<i>Ulmus crassifolia</i>
American Elm	<i>Ulmus americana</i>
Bald Cypress	<i>Taxodium distichum</i>
Black Walnut	<i>Juglans nigra</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Texas Ash	<i>Fraxinus texensis</i>
Southern Magnolia	<i>Magnolia grandiflora</i>

Table 6.10 TABLE B Net Urban Forestry Area		
Net Urban Forestry Area	Square Feet	Acres
Gross area of property		
Utility rights-of-way or easements regulated by the Public Utility Commission/Texas Railroad Commission	--	--
Net urban forestry area		

Table 6.11 TABLE C Required Tree Canopy Area		
	Square Feet	Acres
Net Urban Forestry Area		
Land Use/Canopy Coverage ratio One- or two-family (40% coverage)	x	

One- or two-family with trees planted on individual lots (25% coverage) Commercial (30% coverage) Industrial (20% coverage)		
Additional 5% if only protected trees are being preserved		
Required canopy coverage		

**Table 6.12 TABLE D Minimum Canopy Retention**

	<b>Square feet</b>	<b>Acres</b>
Existing tree canopy area		
Preservation requirement	X 0.25	X 0.25
Additional 5% if only protected trees are being preserved		
Minimum retention		

**Table 6.13 TABLE E Significant Tree Removal**

	<b>Calculation</b>	<b>Inches DBH</b>	<b>Canopy Sq Ft</b>
All Post Oaks/Blackjack Oaks $\geq 20"$ dbh (if east of I-35)	→		
All other trees $\geq 30"$ dbh (regardless of species or location)	→		
Total of significant trees to be preserved	→		
Significant tree preservation credit	(sq ft x 1.5)		
Total of significant trees to be removed	()→		
<u>Removal Options (Choose One):</u>			
Retention of existing canopy 1.5X the canopy of removed significant trees--in excess of minimum retention	(sq ft x 1.5)		
Planting additional trees 5X the canopy of removed significant trees--in excess of total planting	(sq ft x 5)		
Payment into tree fund for total inches dbh of significant trees removed @ \$200 per inch dbh	(sq ft x \$200)		
Urban Design Commission approved plan that mitigates the removal of the significant tree(s)			

Table 6.14 TABLE F Preferred Tree List

Large Canopy Trees	
Pecan #	<i>Carya illinoensis</i>
Deodar Cedar	<i>Cedrus deodara</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Southern Magnolia#	<i>Magnolia grandiflora</i>
Bur Oak*	<i>Quercus macrocarpa</i>
Chinquapin Oak	<i>Quercus muhlenbergii</i>
Shumard Oak #	<i>Quercus shumardii</i>
Texas Red Oak	<i>Quercus buckleyi</i>
Live Oak *	<i>Quercus virginiana</i>
American Elm	<i>Ulmus americana</i>
Cedar Elm *	<i>Ulmus crassifolia</i>
Lacebark Elm	<i>Ulmus parvifolia</i>
Medium Canopy Trees	
Caddo Maple *	<i>Acer barbatum</i> var. <i>Caddo</i>
Bigtooth Maple *	<i>Acer grandidentatum</i>
Common Persimmon	<i>Diospyros virginiana</i>
Texas Ash	<i>Fraxinus texensis</i>
Ginkgo	<i>Ginkgo biloba</i>
Kentucky Coffeetree	<i>Gymnocladus dioicus</i>
Eastern Red-Cedar *	<i>Juniperus virginiana</i>
Golden Raintree	<i>Koelreuteria paniculata</i>
Eldarica (Afghan) Pine *	<i>Pinus eldarica</i>
Italian Stone Pine	<i>Pinus pinea</i>
Chinese Pistache *	<i>Pistacia chinensis</i>
Honey Mesquite *	<i>Prosopis glandulosa</i>
Blackjack Oak *	<i>Quercus marilandica</i>
Monterrey (Mex. White) Oak *	<i>Quercus polymorpha</i>
Western Soapberry *	<i>Sapindus drummondii</i>
Pond Cypress	<i>Taxodium ascendens</i>
Bald Cypress *	<i>Taxodium distichum</i>
Small Canopy Trees	
Japanese Maple #	<i>Acer palmatum</i>
Common Button-bush	<i>Cephalanthus occidentalis</i>
Redbud *	<i>Cercis canadensis</i>
Desert Willow *	<i>Chilopsis linearis</i>
Rough-leaf Dogwood #	<i>Cornus drummondii</i>
Texas Persimmon *	<i>Diospyros texana</i>



**Table 6.14 TABLE F Preferred Tree List**

Carolina Buckthorn #	<i>Frangula caroliniana</i>
Yaupon Holly *	<i>Ilex vomitoria</i>
Deciduous Holly	<i>Ilex decidua</i>
Creape Myrtle *	<i>Lagerstroemia indica</i>
Mexican Plum *	<i>Prunus mexicana</i>
White Shin Oak *	<i>Quercus sinuata</i> var. <i>breviloba</i>
Flameleaf Sumac *	<i>Rhus lanceolata</i>
Eve's Necklace *	<i>Sophora affinis</i>
Mexican Buckeye *	<i>Ungnadia speciosa</i>
Rusty Blackhaw	<i>Viburnum rufidulum</i>

\* Drought tolerant species

# Not recommended for parking lots or high heat areas

**Table 6.15 Table G Tree Preservation and Planting Area**

	Square feet	Acres
Area of existing tree canopy retained		
Planting		
_____ large canopy trees @ 2,000 square feet per tree (minimum spacing of 40 feet on center)		
_____ medium canopy trees @ 700 square feet per tree (minimum spacing of 24 feet on center)		
_____ small canopy trees @ 100 square feet per tree (minimum spacing of 8 feet on center)		
_____ additional trees		
Total preservation and planting		

**Table 6.16 TABLE H Parking Canopy Area**

	Square feet	Acres
Parking Areas for Commercial or Industrial Uses		
Area of parking and drives		
Required canopy coverage of parking areas	X 0.4	X 0.4
Required canopy coverage		
Area of canopy coverage being provided		

Table 6.17 TABLE I Initial Urban Forestry Development Agreement		
	Square Feet	Acres
<b>Overall Canopy</b>		
<b>(enter Land Use Type) - Part 1</b>		
<b>Net Urban Forestry Area</b>	Square Feet	Acres
Gross Area of Property		
Utility Easements		
Net Urban Forestry Area		
<b>Required Tree Canopy Area</b>	Square Feet	Acres
Net Area		
Canopy Ratio		
Required Tree Canopy Coverage		
<b>Preservation/Retention of Existing Canopy</b>	Square Feet	Acres
Existing Tree Canopy		
Preservation Requirement (20, 30, 40%)		
Minimum Retention of Existing Tree Canopy		
Area of Existing Tree Canopy Retained		
Preservation Ratio		
<b>Retention of Canopy for Significant and Large Tree Canopy Removal</b>	Square Feet	Acres
Significant and Large Tree Canopy to be Removed		
Preservation Requirement (150%)		
Minimum Retention of Existing Tree Canopy for Removal of Significant and Large Tree Canopy		
Area of Existing Tree Canopy Retained for Removal of Significant and Large Tree Canopy		

Table 6.18 TABLE J Urban Forestry Development Agreement Canopy Tracking									
UFC #	Project Name	Project Address	Site Acreage	Usage Class	Canopy Coverage Required (sq ft)	Canopy Coverage Provided (sq ft)	Off Site Mitigation? (Y/N)	Beginning Land Balance	Ending Land Balance

(Ord. No. 18615, Eff. 5/19/09)